WHAT IS CLAIMED IS:

1. A method for growing a plurality of carbon nanotubes on a selective area, comprising steps of:

a) forming a first masking layer on a first substrate;

b) photolithographing said first masking layer for forming a plurality of specific areas on said first substrate;

c) etching said plurality of specific areas for forming a second masking layer on said first substrate;

d) etching said second masking layer and said first substrate for forming a plurality of tapered structures;

e) applying a catalyst on said plurality of tapered structures;

f) imprinting a second substrate on said first substrate having said catalyst thereon for being a growth substrate with a plurality of vestiges of said catalyst; and

g) growing said plurality of carbon nanotubes on said growth substrate.

2. The method as claimed in claim 1, wherein both said first substrate and said second substrate are silicon substrates.

3. The method as claimed in claim 1, wherein said first masking layer is a first silicon oxide masking layer formed at a temperature ranged from 800 to 1200 ℃ and has a thickness ranged from 2000 to 7000 Å.

4. The method as claimed in claim 1, wherein said step c) is performed by a BOE (Buffer Oxide Etching) solution containing a hydrofluoric acid.

5. The method as claimed in claim 1, wherein said step d) is performed by a chemical solution containing a potassium hydroxide.

6. The method as claimed in claim 1, wherein said step e) is performed by a physical deposition method.

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7. The method as claimed in claim 1, wherein said second masking layer is formed just on said plurality of specific areas.

8. The method as claimed in claim 1, wherein said plurality of tapered structures are a plurality of sharp silicon structures.

9. The method as claimed in claim 1, wherein said step b) further comprises steps of:

b1) providing a mask;

b2) forming a first photoresist layer on said first masking layer; and

b3) etching said first photoresist layer with said mask for forming a second photoresist layer.

10. The method as claimed in claim 9, wherein said second masking layer comprises said second photoresist layer and a second silicon oxide masking layer.

11. The method as claimed in claim 10, wherein said step c) further comprises a step of c1) removing said second photoresist layer by an acetone.

12. The method as claimed in claim 1, wherein said catalyst is a metal catalyst selected from a group consisting of a ferrum, a cobalt, and a nickel.

13. The method as claimed in claim 1, wherein each of said plurality of vestiges of said catalyst has a diameter ranged from 10 to 200 nanometers.

14. The method as claimed in claim 13, wherein each of said plurality of vestiges of said catalyst introduces a growth of each of said carbon nanotubes.

15. A method for growing a plurality of carbon nanotubes on a selective area, comprising steps of:

a) forming a first masking layer on a first substrate;

b) photolithographing said first masking layer for forming a plurality of specific areas on said first substrate;

c) etching said plurality of specific areas for forming a second masking layer on said first substrate;

d) etching said second masking layer and said first substrate for forming a plurality of tapered structures on said first substrate;

e) applying a catalyst on a second substrate;

f) imprinting said first substrate on said second substrate for respectively obtaining a residuum on a tip of each of said plurality of tapered structures; and

g) respectively growing each of said carbon nanotubes on each of said plurality of tapered structures having said residuum.

16. The method as claimed in claim 15, wherein said catalyst is a metal catalyst selected from a group consisting of a ferrum, a cobalt, and a nickel.

17. The method as claimed in claim 15, wherein said step b) further comprises steps of:

b1) providing a mask;

b2) forming a first photoresist layer on said first masking layer; and

b3) etching said first photoresist layer with said mask for forming a second photoresist layer.

18. A method for growing a plurality of carbon nanotubes, comprising steps of:

a) providing a first substrate having a plurality of tapered structures;

b) applying a catalyst on said plurality of tapered structures;

c) imprinting a second substrate on said first substrate for obtaining a plurality of vestiges of said catalyst on said second substrate; and

d) growing said plurality of carbon nanotubes on said plurality of vestiges.

19. The method as claimed in claim 18, wherein said catalyst is a metal catalyst selected from a group consisting of a ferrum, a cobalt, and a nickel.

20. A carbon nanotube structure, comprising:

a silicon substrate;

at least an imprinted vestige deposited on said silicon substrate; and

at least a carbon nanotube grown on said imprinted vestige.

21. The structure as claimed in claim 20, wherein said imprinted vestige is formed by a metal imprint technique.

22. A carbon nanotube structure, comprising:

a silicon substrate with a plurality of tapered structures; and

a plurality of carbon nanotubes respectively grown on a tip of each of said plurality of tapered structures.

23. The structure as claimed in claim 22, wherein said plurality of carbon nanotubes are grown along a same direction.

24. The structure as claimed in claim 22, wherein said plurality of tapered structures are formed by steps of a photolithography, a first etching, and a second etching.

25. The structure as claimed in claim 22, wherein said plurality of carbon nanotubes are introduced to grow by a metal catalyst.